

## Communications and Electronics Engineering Program

New bylaw

Major Sheet final (2017-2018) لائحة 2017

Modified in 17-8-2017

Course Code	Course Name	Prerequisite	Credit Hour	Lec	Lab	Tut	Comments
<b>Semester One</b>							
BAS 011	Mathematics1	----	3	2	0	2	
BAS 021	Physics1	----	3	2	2	1	
BAS 041	Engineering Chemistry	----	3	2	2	1	
MED 011	Engineering Drawing & Projection	----	3	1	3	3	
HUM 012	English Language 1	HUM X52	2	1	0	2	
MED 021	History of Engineering & Technology	-----	1	1	0	0	
BAS 031	Mechanics 1	----	2	2	0	2	
			<b>17</b>				
<b>Semester Two</b>							
BAS 012	Mathematics2	BAS 011	3	2	0	2	
BAS 022	Physics 2	BAS 021	3	2	2	1	
BAS 032	Mechanics 2	BAS 031	2	2	0	2	
HUM 352	Human Rights		1	1	0	0	
MED 022	Principles of Manufacturing Engineering	----	2	2	1	1	
HUM 013	English Language 2	HUM 012	2	1	0	2	
HUM 011	Arabic Language	----	2	2	0	0	
HUM 081	Computer Skills	----	1	1	4	0	
<b>DRAF</b>	<b>Industrial Application of Drafting</b>		<b>3</b>				<b>Canadian</b>
			<b>16</b>				<b>19 Canadian</b>
<b>Semester Three</b> <span style="float: right;"><b>Level 0 : (32) (Canadian 35)</b></span>							
ELP 115	Electrical Materials	BAS 022	3	2	0	2	
ELC 221	Computer Programming	HUM 081	3	2	1	1	
IEN 351	Engineering Economics		2	2	0	1	
BAS 111	Mathematics3	BAS 012	3	2	0	2	
ELP 112	Electrical Circuits 1	BAS 022	2	2	2	2	
HUM-A1	General Elective A ( or CE 1&2)		2	2	0	0	
HUM 111	Technical Report Writing	HUM 013	2	1	0	2	
			<b>17</b>				
<b>Semester Four</b>							
ELP 113	Electrical Circuits 2	ELP 112	2	2	2	2	
ELP 114	Electrical Measurements & Testing	BAS 022	3	2	2	1	
BAS 211	Mathematics 4	BAS 111	3	2	0	2	
ELE 221	Digital & Logic Circuits	ELP 112	3	2	2	2	
BAS 212	Statistics & Probability Theory		3	2	0	2	
HUM-B1	General Elective B		2	2	0	0	
			<b>16</b>				

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<b>Semester Five</b>			<b>Level 1 : (67) (Canadian 70)</b>				
ELE 222	Electronic Devices	ELP 115/ ELP 113	3	2	2	2	
ELC 251	Modeling & Simulation of Engineering Systems	BAS 111/ ELP 113	3	2	2	2	
BAS 311	Mathematics 5	BAS 211	3	2	0	2	
ELC 311	Computer Organization & Architecture	ELC 221/ ELE 221	3	2	0	2	
ELP 141	Electromagnetic Fields 1	BAS 022/ BAS 012	2	2	0	2	
IEN 314	Project Management		2	2	0	1	
---	-A2Institute Elective A		2	2	0	1	
			<b>18</b>				
<b>Semester Six</b>							
---- 291	Field Training 1		1	0	6	0	
ELE 321	Electronic Circuits	ELE 222	3	2	2	2	
ELP 181	Energy Conversion	ELP 112	3	2	0	2	
ELE 241	Microprocessors & Applications	ELC 311	3	2	2	2	
ELE 271	Signal Analysis	ELP 113/ BAS 211	3	2	2	2	
HUM 182	Analysis & Research Skills		2	1	0	2	
ELP 142	Electromagnetic Fields 2	ELP 141	2	2	0	2	
<b>ELEC 2168</b>	<b>Programmable Logic Controllers</b>	<b>ELE 221</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>Canadian</b>
			17				20 Canadian
<b>Semester Seven</b>			<b>Level 2: (102) (Canadian 108)</b>				
---- 391	Field Training 2	--- 291	1	0	6	0	
ELE 361	Electrical Communications	ELE 271	3	2	2	2	
ELP 241	Electrical Machines & Transformer	ELP 141/ ELP 113	3	2	2	2	
ELE 322	Electronics Engineering	ELE 321	3	2	2	2	
ELC 361	Automatic Control	ELC 251	3	2	2	2	
ELC 331	Computer Networks	ELC 221	3	2	0	2	
HUM	-A2 General Elective A		2	2	0	2	
<b>ELEC 3161</b>	<b>Embedded operating Systems</b>		<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>Canadian</b>
			<b>18</b>				<b>21 Canadian</b>
<b>Semester Eight</b>							
ELP 321	Electrical Power	ELP 241	3	2	2	2	
ELP 361	Power Electronics	ELE 222	3	2	2	1	
ELE 471	Digital Signal Processing	ELE 271	3	2	2	2	
ELE 462	Digital Communication Systems	ELE 361	3	2	2	2	
ELE 411	Integrated Circuits Design	ELE 321	3	2	2	2	
HUM-351	Professional Ethics		1	1	0	0	

Course Code	Course Name	Prerequisite	Credit Hour	Lec	Lab	Tut	Comments
HUM	-A3 General Elective A		2	2	0	0	
			<b>18</b>				

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<b>Semester Nine</b>			<b>Level 2: (137) (Canadian 206)</b>				
ELE 453	Microwave Engineering	ELP 141	3	2	2	2	
ELE 463	Mobile Communications	ELE 361	3	2	0	2	
---	-A2 Institute Elective A		2	2	0	1	
CIW 331	Environmental Impact of Projects		1	1	0	0	
ELE 491	Project 1		2	1	0	2	
ELE	-A3 Communication & Electronics Elective A		3	2	0	2	
			<b>14</b>				
<b>Semester Ten</b>							
ELE 461	Antenna & Wave Propagation	E LP 141	3	2	2	2	
ELE	-A3 Communication & Electronics Elective A		3	2	0	2	
IEN 131	Monitoring & Quality Control System	-----	1	1	0	0	
ELE 492	Project 2	ELE 491	4	2	4	4	
ELE	-A3 Communication & Electronics Elective A		3	2	0	2	
-----	-A3 Institute Elective A		2	2	0	1	
			<b>16</b>				
<b>Level 3 : (167) (Canadian 176)</b>			<b>Graduate by an accumulative GPA <math>\geq</math> 1.7</b>				

<b>Institute Requirements ( Elective A ) (Select 6 Credit Hrs)</b>		<b>Prerequisite</b>	<b>Cr.Hr</b>	<b>Lec</b>	<b>Lab</b>	<b>Tut</b>
CIS 111	Principles of Construction & Building Engineering		2	2	0	1
ARC 111	Arts & Architecture	MED 011	2	2	0	1
ELP 111	Principles of Electrical Engineering	BAS 022	2	2	0	1
ELE 121	Principles of Electronic Engineering		2	2	0	1
MED 111	Principles of Design & Manufacturing Engineering		2	2	0	1
MEP 111	Principles of Mechanical Power Engineering	BAS 022/BAS 031	2	2	0	1
<b>Minor Requirements ( Elective A ) (Select 9 Credit Hrs)</b>		<b>Prerequisite</b>	<b>Cr.Hr</b>	<b>Lec</b>	<b>Lab</b>	<b>Tut</b>
ELE 413	Embedded Systems	ELE 321	3	2	0	2
ELE 421	Optoelectronics	ELE 321	3	2	1	2
ELE 422	Medical Electronics	ELE 321	3	2	1	1
ELE 423	Automotive Electronics	ELE 321	3	2	0	2
ELE 431	VLSI Technology	ELE 321	3	2	0	2
ELE 442	Microcontrollers & Applications	ELE 241	3	2	2	2
ELE 454	RADAR Systems	ELP 141	3	2	0	2
ELE 455	Acoustics	ELE 361	3	2	0	2
ELE 464	Information and Coding Theory	ELE 361	3	2	0	2
ELE 465	Optical Communications	ELE 361	3	2	1	2
ELE 466	Telephony Systems	ELE 361	3	2	0	2
ELE 467	Satellite Communications	ELE 361	3	2	0	2
ELC 432	Information Security	ELC 331/ELC 221	3	2	0	2
<b>General Requirements ( Elective A ) (Select 8 Credit Hrs)</b>			<b>Cr.Hr</b>	<b>Lec</b>	<b>Lab</b>	<b>Tut</b>
HUM x62	Music Appreciation		2	2	0	0
HUM x71	Introduction to History of Civilization		2	2	0	0
HUM x72	Trends in Contemporary Arts		2	2	0	0
HUM x73	Recent Egypt's History		2	2	0	0
HUM x74	Heritage of Egyptian Literature		2	2	0	0
HUM x75	Arab & Islamic Civilization		2	2	0	0
HUM x76	Literary Appreciation		2	2	0	0
HUM x51	Communication in Education 1 (Starting for 2014 students)	Based on English placement test	2	2	0	0
HUM x52	Communication in Education 2 (Starting for 2014 students)		2	2	0	0
HUM x82	New Trends in Engineering Development		2	2	0	0
HUM 181	Communication & Presentation Skills		2	1	0	2
HUM 381	Principles of Negotiation		2	2	0	0
<b>General Requirements ( Elective B ) (Select 2 Credit Hrs)</b>			<b>Cr.Hr</b>	<b>Lec</b>	<b>Lab</b>	<b>Tut</b>
HUM 121	Introduction to Accounting		2	2	0	0
HUM 221	Business Administration		2	2	0	0

Head Of Department

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